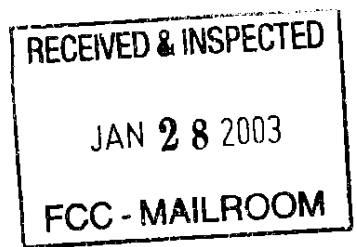


Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C.



In the Matter of:

FCC Spectrum Policy Task Force  
Report and Recommendations

ET Docket No.: 02-135

January 15, 2003

TO: Federal Communications Commission  
Spectrum Policy Task Force

**SUMMARY**

In the United States today, the vast majority of us receive most of our information (and entertainment) through the medium of television. **As** a method of information delivery, no other vehicle possesses television's immediate capacity to reach an extended audience, and to provide that audience with up to the moment, real time information. Stating the obvious, television's ability to supply coverage as an event occurs is unique. Protecting and developing that ability serves the public interest and is in keeping with the underlying intent of the Communication Act.

The ability of broadcasters to provide real time, on location, television coverage of newsworthy events depends upon an ability to gain, anywhere in the United States, at anytime and often with little prior notice, interference free access to a defined, sufficient and protected spectrum of frequency for wireless cameras, microphones and communications.

Alternative methods of spectrum assignment and control, to that with which we have historically used, namely a "commons" and/or a "property" approach may well be appropriate in contexts other than those faced by broadcasters. Broadcasters require, in order to be able to provide real time broadcasts of breaking news, sports and other events of public interest, the guaranty of available spectrum that may only be adequately provided by a continued application of the Commission's grant of authority under the Communication Act. "Command and control" needs to continue to be applied by the Commission in reference to the broadcast auxiliary service.

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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
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In the Matter of

FCC Spectrum Policy Task Force  
Report and Recommendations

ET Docket No.: 02-135

January 15, 2003

TO: Federal Communications Commission  
Spectrum Policy Task Force

**Comments of  
Total RF Marketing, Inc.  
and Broad Comm, Inc.**

**Introduction**

Total RF Marketing, Inc. (Total RF) is a supplier of wireless broadcast infrastructure and communications facilities to the broadcast industry, other commercial enterprises and local, state and federal governments. We have been in operation for over eleven (11) years and maintain our headquarters outside of Philadelphia, Pennsylvania. Our full-time engineering staff enjoys a combined 500+ years of wireless broadcast experience. While most of our team have come to us from the broadcast industry itself (from local stations and the networks) we also have a number of engineers whose backgrounds were forged in government and industry. Total RF therefore profits from a depth and breadth of experience unique within the broadcast industry.

We have had the opportunity to provide our equipment and services at such events as the Olympics (all since Barcelona in 1992), most major professional golf events (PGA and LPGA) and virtually every other major form of sporting event in the United States and internationally. We were instrumental in reestablishing communications for the major networks subsequent to the terrorist attacks of September 11, 2001. Further, we are also involved in educational broadcasts. Total RF partners with the "JASON

Foundation” in providing live, interactive educational broadcasts’ and is presently involved with such an endeavor in the Channel Islands off the California coast. Total RF engineered and executed the first totally digital broadcast coverage of a sporting event in 1999 at the Americas Cup Races in Auckland, New Zealand. Today we are proud to be pioneering the development and utilization of extremely low latency digital wireless cameras, wireless digital audio and a number of other technologic innovations aimed at enhancing spectral efficiency.

Total RF holds FCC licenses within the Broadcast Auxiliary Band, the Industrial Band as well as in the Local TV Band. We are intimately (and on a daily basis) involved in the art, science and diplomacy of frequency coordination. Our president, Steve Gansky, is the local Society Broadcast Engineers (SBE) frequency coordinator for the Philadelphia, Pennsylvania geographic area.

Broad Comm, Inc. is a technology consulting firm based in NY and Washington, DC specializing in communications technology for the broadcast, wireless and Internet environment. Broad Comm is responsible for the licensing and maintenance of many FCC licenses, in many different services, including Radio, TV and satellite and assists companies by providing solutions to accelerate growth through the creation of a network of successful business affiliations in primarily the wireless field. Broad Comm’s RF clients include television broadcasters, satellite corporations, Public Safety Organizations, as well as commercial enterprises. The President of Broad Comm, Inc., Louis Libin, is a Senior Member of the Institute of Electrical and Electronic Engineers (IEEE), and is a member of the National Society of Professional Engineers. He is also active in the Society of Motion Picture and Television Engineers (SMPTE) and the Society of Broadcast Engineers (SBE). Since 1989, Mr. Libin has represented the United States on satellite and transmission issues at the International Telecommunications Union (the ITU) in Geneva, Switzerland. Mr. Libin was also a Specialist Committee Chairman to the Federal Communications Commission (FCC) Advisory Committee on Advanced Television, and was Chairman of a Government Advisory Group on Wireless Issues.

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<sup>1</sup> The JASON Foundation is a not-for-profit entity engaged in developing innovative, hands on classroom experiences in science for secondary school students across the United States. It sponsors each year an “expedition” staffed by scientists, researchers and a team of high school students. The explorations and experiments are broadcast live, to thousands of other students in their classrooms who may then

## Our Perspective

As noted, Total RF provides wireless infrastructure to numerous clients, many of whom are broadcasters. We supply the equipment and personnel required to produce on-site, real time broadcasts of exemplary quality. We utilize wireless cameras, wireless microphones, digital microwave links as well as all of the ancillary equipment necessary to facilitate these types of broadcasts. Our goal is, so to speak, to be able to replicate on site (be it at a sporting or news event), the facilities available to a television director as if she were in a studio environment. We also provide the engineering and technology necessary to allow the director the ability to put the audience into the action with “Point of View” cameras and remote miniature wireless microphones.

The majority of our business is in cooperation with the national television networks in the facilitation and broadcast of television coverage of major events. As such, we find ourselves utilizing the extraordinarily finite number of frequency bands allocated to the Broadcast Auxiliary Service (BAS) at 2, 2.5, 7 GHz, 13 GHz and 18 GHz.

Of course, as the “newsworthiness” and resulting public interest in a particular event increases so does the level of participation and coverage by a broadcaster (or several broadcasters). This inexorably leads to multiple users, of multiple pieces of equipment, vying for airwave access within the allocated BAS frequency spectrum.

Inevitably and predictably, as the magnitude of the event increases so does the extent of the problem. In some cities in the United States (New York, Los Angeles) and at some events (2002 Salt Lake Olympics, the Super Bowls, the Democratic and Republican National Conventions) the available BAS spectrum is totally, completely and absolutely saturated. Further exacerbating an already impossible situation, has been the reallocation of the 1990-2025 MHz segment of the BAS band. Also in the area of wireless microphones, Total RF (and all broadcasters) must cope with the substantial difficulties attendant to their use with the expected loss of UHF channels 52 through 69 due to “band clearing”.

What we now experience are more broadcasters, with more wireless cameras and associated RF radiating equipment attempting to shoehorn their way into limited, and now disappearing, spectrum.

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interact with the expedition members. These broadcasts are also picked up and aired by other Broadcasters

The coordination of radio communication and wireless camera usage at events such as the Olympics, the Super Bowl and our national political conventions has so far worked – in a fashion. However, that process is fast approaching “critical mass”. Even now in many cases the coordination process taxes past any reasonable limit the beneficence of the SBE Coordinators whose donation of time and effort to this task has been nothing short of miraculous. However, inevitably and invariably even with the Herculean efforts of the Coordinators, the individual broadcasters and their sub-contractors, conflicts and interference occur.

Interference during the broadcast of a live television show is much more than an inconvenience. Interference can and does deny the audience with the event coverage they desire and reasonably expect. Its occurrence is not something that is amenable to correction after the fact. Where it occurs, the harm has been done, the coverage adversely impacted and the damages to that broadcast are irreparable. If a license to operate within a particular frequency is seen as a definable property ownership right, the legal prerogative to compensation for damage to that property right in this instance is inadequate to address any trespass.

Instances of interference during a broadcast and of substantial (and occasionally insurmountable) difficulties in frequency coordination in the BAS band are increasing at a rate that is frightening for any broadcaster. These problems are a serious and constant impediment to producing quality broadcasts of newsworthy events.

Broadcasters of national (and international) sporting events, news and educational programs and their supporting organizations, such as Total RF, are by their very nature itinerant. We find ourselves operating in various geographic locations throughout the country, in fact throughout the world, at any given time and for short periods of time. In fact, the Olympics would present generally the longest, in a temporal sense, activity that we generally are engaged in broadcasting. Even though our operation is itinerant and temporary, it is usually, extremely intensive. In other words, when we are covering a newsworthy event, it is absolutely imperative to the broadcaster that our equipment and technology operate interference free.

The wireless services and technology provided by broadcast auxiliary services are the “first step” in virtually all on location electronic news gathering operations. Wireless cameras and microphones allow the broadcast journalist to present the audience with live pictures and sound from the event. However this ability is determined, to a great extent, by the journalist’s freedom to move quickly and without impediment to the sight of the event. If the journalist is tethered (by the hard wires of the camera or microphone) his ability to present coverage is artificially limited.

Our product goes out to the public in “real time” – the moment it occurs. This is whether we are broadcasting a Big 10 College football game, the events and an interview at a political convention or the final hole of the U.S. Open. Our product is entirely time sensitive in the truest and most absolute sense. The news is only news when it is, in fact and in deed, occurring.

In addition, as technology advances, new and innovative broadcast techniques are introduced and become the standard by which the public judges the “quality” of a broadcast. For example, in car cameras, player microphones, referee cameras and similar devices (all of which are dependent on wireless technology for their use in a “live” broadcast) have become the norm. This growth in devices, as well as in the number and extent of broadcasts accomplished on location and live, has resulted in an explosive growth in the use of the **BAS** spectrum.

Total RF provides infrastructure to the television industry (amongst others). We are extraordinarily proud of that fact and the focus of our business. While some Commentators appear to denigrate the broadcast industry in general and television in particular for a perceived failure to meet certain subjective standards for the nature and quality of its content, let us not forget that content is driven by what the customer (the public) desires to consume. In the BAS arena we are speaking of sports, live entertainment and news broadcasts. As has been stated by the Society of Broadcast Engineers;

“Besides providing high quality programming for news and sporting events, TV ENC also provides time sensitive and critical pictures of natural and man-made disasters...”<sup>2</sup>

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<sup>2</sup> Comments of The Society of Broadcast Engineers, ET 95-18, page 9

These broadcasts are certainly important to a vast portion of the public to whom the Commission and the television industry owe a responsibility to serve.

## Discussion

It is interesting to note that **we** find ourselves, essentially 100 years to the day of Marconi's first true transcontinental radio transmission', addressing a problem that was inconceivable at that time – the actual, or perceived, scarcity of spectrum. The realization, or as some might prefer, belief, that spectrum was and is “scarce” and therefore needed to be controlled and managed had its genesis shortly after Westinghouse inaugurated the nation's first radio station, KDKA, in Pittsburgh, in 1920. Within several years hundreds of other new stations began broadcasting.

By 1922, it was clear that the explosive growth in **AM** radio was threatening its continued viability due to rampant interference. Then Commerce Secretary, Herbert Hoover; attempted to deal with the problem through a series of four (4) conferences held between 1922 and 1925. There, a voluntary solution to the interference problem was attempted, without success. After Hoover's Commerce Department was repeatedly chastised for exceeding its statutory grant of authority by the Courts<sup>4</sup> Congress stepped into the fray. When Congress passed the Radio Act of 1927 and created the precursor to the Federal Communications Commission, the Federal Radio Commission, it empowered that Commission to issue licenses where the “public interest, necessity or convenience would be served”.<sup>5</sup>

In 1934 the Communications Act was passed, with an objective to “make available, so far as possible, to all the people of the United States a rapid, efficient, nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”<sup>6</sup> The Communications Act recognizes that the “ownership” of the airwaves is a public asset – not a private one. In fact, as to the individual “user” of spectrum the Act states that only a temporary, clearly defined and

<sup>3</sup> On January 18, 1903 Guglielmo Marconi transmitted a 54-word message from President Theodore Roosevelt to King Edward VII, and received a response.

<sup>4</sup> See for example; *U.S.v. Zenith Radio Corp.*, 12 F.2d 614 (N.D. Ill., 1926).

<sup>5</sup> *Electronic Media Law & Regulation*, 3<sup>rd</sup> Ed, Creech, K., Focal Press 2000, chapter 3, page 51, “The Rationale of Broadcast Regulation” generally.

<sup>6</sup> Communications Act of 1934, 47 U.S.C. § 151 (1988)

delimited permission (license) to utilize that asset may be given to any person.<sup>7</sup> The Act, continuing as to the equipment used, provides that the newly created Federal Communications Commission “may, consistent with the public interest, convenience and necessity, make reasonable regulations governing the interference potential of [radio frequency] devices”.<sup>8</sup> Finally and importantly, the Commission is granted and empowered with enforcement obligations and powers.<sup>9</sup> Title IV of the Act” sets forth and describes the processes to be used for enforcement purposes by the Commission.

The Commission therefore is endowed with certain specific powers” to facilitate the performance of its primary responsibility – the development and protection of the use of the airwaves in and for the public interest.

#### Current Situation

Where once there was only **AM** radio, the Commission, the users of spectrum, the Legislature and the public are now faced with a virtual cornucopia of methods of radio frequency spectrum use whose manner of utilization was undreamed of twenty (20) years ago, let alone seventy-five (75) years ago when the electromagnetic spectrum was first allocated to users and uses by the Federal government.

A reading of the Comments in this Proceeding, as well as the Reports of the various Working Groups, is sufficient to convince us that it is almost universally accepted that the old methodology of spectrum management -- that which is generally referred to as the “Command and Control”<sup>12</sup> model no longer “works” for most spectrum users. Of course, exactly which portion of the current methodology of spectrum management does not “work” and in exactly what way it does not “work” is dependent upon the peculiarly unique position of the party commenting on that management.

Total RF desires to comment here on the impact of recent changes in the Broadcast Auxiliary allocations as well as what we see to be the ultimate effect upon these services should the Commission adopt the Task Force’s recommendations.

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<sup>7</sup> 48 U.S.C. § 301

<sup>8</sup> 48 U.S.C. § 302 (a)

<sup>9</sup> 47 U.S.C. § 312

<sup>10</sup> 47 U.S.C. § 401, *et seq.*

<sup>11</sup> 48 U.S.C. § 303

<sup>12</sup> The “Command and Control Model” has been defined by the Spectrum Policy Task Force as being the “traditional process of Spectrum Management in the United States, currently used for most Spectrum within the Commission’s jurisdiction in which allowable Spectrum uses are limited based on regulatory judgments”. *Spectrum Policy Task Force Report I*, November 15, 2002, Page 5.



Specifically, we address the following portions of the Task Force's recommendations and the manner in which we perceive these suggestions would impact upon News, Sports and "on-site" live Entertainment and Educational broadcasting in the United States:

**A. *Expand the use of both the exclusive rights and commons models, and move away from the command-and-control model, with limited exceptions***<sup>13</sup>.

It appears that the Commission's Task Force has reached the conclusion that the objectives of "spectral efficiency" and "flexibility" may best be attained through a spectrum assignment model and philosophy that is quite different than that with which the Commission and the various industries it oversees have matured.

The Task Force appropriately recommends that the Commission consider "a balance among three (3) general models for the assignment of spectrum usage rights".<sup>14</sup> These three models, of course are: a) the "Exclusive Use" model, b) the "Commons" model, and c) the "Command and Control" model.

In the Report itself, the Task Force notes that the Commission has traditionally allocated spectrum for broadcast use. This allocation has been generally based upon the statutory requirements of the Communications Act and the nature of the broadcast services themselves. We understand that the Task Force has taken the position that there are valid, justifiable reasons for continuing the application of the command and control model to the existing broadcast spectrum.<sup>15</sup>

<sup>13</sup> Paragraph C, recommendation number 23, "Spectrum Usage Models Recommendations", *Spectrum Policy Task Force Report*, November 15, 2002.

<sup>14</sup> "Spectrum Rights Models

- Based on the principle that "one size does not fit all" in spectrum policy, the Commission should consider a balance among three general models for assigning spectrum usage rights:
  - "Exclusive use" model. A licensing model in which a licensee has exclusive and transferable flexible use rights for specified spectrum within a defined geographic area, with flexible use rights that are governed primarily by technical rules to protect spectrum users against interference.
  - "Commons" model. Allows unlimited numbers of unlicensed users to share frequencies, with usage rights that are governed by technical standards or etiquettes but with no right to protection from interference.
  - "Command-and-control" model. The traditional process of spectrum management in the United States, currently used for most spectrum within the Commission's jurisdiction, in which allowable spectrum uses are limited based on regulatory judgments."

*Spectrum Policy Task Force Report*, November 15, 2002, page 5.

<sup>15</sup> "Broadcast spectrum should remain subject to the current regulatory model, which is based on statutory public interest objectives. Over the longer term, the Commission should periodically reevaluate its broadcast spectrum policies." *Spectrum Policy Task Force Report*, November 15, 2002, page 6.

We assume that this includes the Broadcast Auxiliary spectrum, which for a number of reasons is even less susceptible to allocation under the alternative spectrum assignment models than other broadcast services.

**As** has been stated in this Comment, auxiliary broadcasters such as Total RF are itinerant. We move from place to place and from time to time to provide coverage of newsworthy events. The infrastructure that is provided by auxiliary services such as Total RF is absolutely essential to the provision of real time on-site coverage of these events. While an ever greater majority of the consumers of television receive their signal through cable or satellite (as opposed to over the air broadcast) the actual collection of the sound and images on-site at sporting events, live entertainment programs and news coverage is increasingly and importantly obtained and collected by wireless technology.

Broadcasters, in order to provide “state of art” live, on location television must be assured of a static, defined and sufficient cache of spectrum throughout the United States that is guaranteed to be available for their broadcast infrastructure. Without that guarantee, again on a national basis, the ability to provide instantaneous real time coverage is severely curtailed if not destroyed.

As the Society of Broadcast Engineers has stated, “BAS supports all of the ‘immediacy’ news media. Broadcast radio and television, including cable television (i.e. CARS pick up stations), are all supported by the same limited bits of BAS spectrum, and there is no other (non-military, at least) spectrum allocated with the ability to carry large amounts of information *to* the public, with little notice ...”<sup>16</sup>

**As** we have noted, Total RF believes that the Task Force’s recommendations regarding movement away from the command and control model is appropriate in most of the other services. We respectfully request that the Commission take cognizance of the fact and act upon the realization that availability of spectrum and uninterrupted service within the BAS band is absolutely requisite to an appropriately functioning broadcast news and sports operation. Accordingly, we believe the Task Force is correct in advocating the continuing use of command and control methodology within the BAS and broadcast services. Further, given the growth in wireless devices and the resulting clamor for BAS spectrum attendant at any large event in a major metropolitan area in the

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<sup>16</sup> Comments of the Society Broadcast of Engineers, ET Docket: 02-135, **page 2**, paragraph 3

United States we urge the Commission to consider assigning additional and expanded spectrum to the **BAS** service.

Again, as previously stated, we believe that use of either of the alternative two (2) models of frequency assignment is completely inappropriate in the BAS service.

For example, visualize the application of the “exclusive rights” or property model approach in this area. Spectrum utilization rights in particular geographic areas would be owned throughout the United States by various unrelated individuals and entities. These rights might be held by tens, hundreds, or thousands of individual owners of spectrum. Broadcasters desiring to utilize wireless infrastructure at an event would be required to contact these owners for permission to use their spectrum. While we (the broadcasters) may have weeks or months of advance notice of the location and identity of the frequency rights owners (as in the case of a scheduled sporting event) in many cases we may have only a moments notice (as in the case of “breaking” news). Broadcasters would then be required to negotiate “leases” of the spectrum rights in the location prior to their utilization. In many cases we could easily expect that those negotiations would be protracted, expensive and that the costs (both in time and actual rental) might well be prohibitive. Such a situation could easily result in at least a serious diminution in the quality of the broadcast (if Broadcasters were forced to forgo wireless applications on site due to costs or unavailability) and possibly, particularly in the context of a “news” event or crises, an inability to broadcast on location coverage at all. This scenario is directly contrary to the interests of the public and our right and reasonable expectation of quality live television.

In the event that a “Commons” model was utilized for the BAS service, the results would be catastrophic for broadcasting and the public. It is easy to envision a mad rush to obtain spectrum for coverage of an event by broadcasters who may well find other users already located at those frequencies.

A short review of the history and factors leading to the passage of the Radio Act of 1927 and the Communications Act of 1934 is illustrative. After the end of World War One, the growth of broadcast radio was explosive. In March 1922 there were sixty (60)

radio stations broadcasting. By November 1922 that number had grown to 564.” Broadcasters who happened to have established their operations adjacent to other broadcasters (or who became adjacent to other broadcasters) soon found their transmissions downed in a sea of interference. The situation became so intolerable that the broadcasters, unable to themselves cure the problem, sought federal legislation.<sup>18</sup> As Justice Frankfurter commented regarding the “chaos” which preceded the enactment of the Communications Act of 1934, “With everybody on the air, nobody could be heard.”

While there are those who argue, some quite eloquently<sup>20</sup>, for the abolition of “command and control” as a method of frequency management—their arguments fail when dealing with the realities of the broadcast industry. The “commons” model cannot work in any manner even remotely supportive of the broadcast auxiliary services. As with the broadcasters in the ‘20s, the broadcast auxiliary services require the structure, direction and enforcement capabilities of a single nationwide and jurisdictionally empowered entity.<sup>21</sup>

<sup>17</sup> Wallenberg, J., in *Legislative History of the Communications Act of 1934*, Oxford University Press, (1989) at page 62, quoting L. F. Schmeckebier, *The Federal Radio Commission*, (1932), at 4.

<sup>18</sup> Wallenberg, J., *Id* at 61

<sup>19</sup> *NBC v United States*, 319 U.S. 190, 212 (1943)

<sup>20</sup> *See generally*: Huber, P, *Law and Disorder in Cyberspace*, Oxford University Press (1997)

<sup>21</sup> Justice Frankfurter provided an excellent narrative history detailing the turmoil extant within the industry during its infancy, and without the structure provided by a recognized arbiter in his Opinion in *NBC v United States*:

“The number of stations increased so rapidly, however, and the situation became so chaotic, that the secretary, upon the recommendation of the National Radio Conferences which met in Washington in 1923 and 1924, established a policy of assigning specified frequencies to particular stations. The entire radio spectrum was divided into numerous bands, each allocated to a particular kind of service. . . . But the problems created by the enormously rapid development of radio were far from solved. The increase in the number of channels was not enough to take care of the constantly growing number of stations. Since there were more stations than available frequencies, the Secretary of Commerce attempted to find room for everybody by limiting the power and hours of operation of stations in order that several stations might use the same channel. The number of stations multiplied so rapidly, however, that by November, 1925, there were almost 600 stations in the country, and there were 175 applications for new stations. Every channel in the standard broadcast band was, by that time, already occupied by at least one station, and many by several. The new stations could be accommodated only by extending the standard broadcast band, at the expense of the other types of services, or by imposing still greater limitations upon time and power. The National Radio Conference which met in November, 1925, opposed both of these methods and called upon Congress to remedy the situation through legislation. The Secretary of Commerce was powerless to deal with the situation. . . . An Illinois District Court held that the Secretary had no power to impose restrictions as to frequency, power, and hours of operation, and that a station’s use of a frequency not assigned to it was not a violation of the Radio Act of 1912. *United States v. Zenith Radio Corp.*, 12 F.2d 614. . . . The Secretary of Commerce issued a statement abandoning all his efforts to regulate radio and urging that the stations undertake self-regulation. But the plea of the Secretary went unheeded. From July, 1926, to February 23, 1927, when Congress enacted the Radio Act of 1927, . . . almost 200 new stations went on the air. These new stations used any frequencies they desired, regardless of the interference thereby caused to

The “commons” model, as history has shown in relation to broadcasters generally in the 1920’s, will not work when applied to the broadcast auxiliary services. Perhaps, arguably, someday in the future we will be blessed with technology that is able to render interference to the realm of a bad memory. Until that day however, there is no reason whatsoever to believe that absent clearly defined, carefully (and centrally) controlled assignment of spectrum that we would experience anything other than bedlam in attempting live news and sports broadcasts

It is clear therefore, that “command and control” in the assignment of spectrum “rights” in its historic sense is necessary within the Broadcast Auxiliary Services in order to guarantee the availability of spectrum so as to provide quality televised coverage for the public in the United States

***B. Transition legacy command-and-control bands to more flexible rules and uses to the maximum extent possible (whether under the exclusive rights or commons model), with only limited exceptions.***<sup>22</sup>

Total RF believes that transitioning many of the other services to an exclusive rights or commons model may well be appropriate under all of the circumstances and given the unique aspects of each of those other services. However, it will not work in the BAS bands, a fact that appears to have been recognized by both the Task Force as a whole as well as the Commission’s Spectrum Rights and Responsibilities Working

Justice Frankfurter accurately noted that the “[r]egulation of radio was therefore as vital to its development as traffic control was to the development of the automobile.”<sup>24</sup> He further stated that “(i)n enacting the Radio Act of 1927, the first comprehensive scheme of control over radio communication, Congress acted upon the knowledge that if the potentialities of radio were not to be wasted, regulation was essential.”<sup>25</sup> These

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others. Existing stations changed to other frequencies and increased their power and hours of operation at will. The result was confusion and chaos, With everybody on the air, nobody could be heard”. *NBC v United States*, 319 U.S. 190 (1943)

<sup>22</sup> Paragraph C, recommendation number 24, “Spectrum Usage Models Recommendations” *Spectrum Policy Task Force Report*, November 15, 2002

<sup>23</sup> “For the time being, broadcast spectrum should continue to be subject to the command-and-control model due to the public interest obligations placed on broadcasters and the free over-the-air nature of broadcast service.” *Spectrum Rights and Responsibilities Working Group Report*, November 15, 2002, page 44.

<sup>24</sup> *NBC v United States*, 319 U.S. 190, 212 (1943)

<sup>25</sup> *NBC v United States*, 319 U.S. 190, 212 (1943)

comments and observations, as they apply to the broadcast auxiliary service, are as applicable today as they were in 1943. Interference is an anathema to quality television broadcasts no matter where in the chain of delivery it occurs. While the concern of the broadcasters, the early Commission, its predecessors and the Courts was interference that impacted upon the delivery of the signal to the ultimate receiver, here we deal with interference at the first level -- that which occurs at the actual capture of the picture and sound.

The Federal Communications Commission has its genesis in the Communications Act of 1934. The Act establishes the Commission and notes its purpose. The Act then proceeds to provide the Commission with the obligation to receive, review and issue, where appropriate, licenses for the use of spectrum. It imposes upon the Licensee obligations to comply with the reasonable regulations as promulgated by the Commission and further delineates available sanctions and, importantly, the procedures to be utilized in the enforcement of the Commission's regulations and Orders. As a creation of Congress the Commission has been legislatively endowed with relevant jurisdiction and given the ability to utilize the Courts where necessary. As an independent agency of the Federal government of the United States, the Commission has been imbued with a degree of legitimacy that allows it to speak with substantial authority when required to do so.

**As** previously noted not only is it a prerequisite to real time, on location television coverage that broadcasters have a defined country-wide set of appropriate frequencies in which to operate wireless devices, but it is further required that those devices when operated, are able to do so without interference. Interference in the context of a television broadcast is unacceptable in that even minor instances of frequency incursion by other users substantially and adversely impacts upon the quality of a broadcast. The television consumer has, in fact, grown to expect that television broadcasts, be they live, on site, live in the studio or taped, be essentially of the same exemplary quality.

The Commission is uniquely endowed with the ability to control access to, and the use of, spectrum. Further, as noted in the Joint Comment of the National Association of Broadcasters and Association for Maximum Service Television, Inc. a "spectrum block is effectively unusable for any purpose unless some authority defines basic technical standards, such as power limits and signal to noise ratios, to control

interference.”<sup>26</sup> Clearly then, the Commission, in order to protect and guaranty the continued ability of national and local broadcasters to provide real time, on location news, sports, educational and entertainment coverage, must control operation within the **BAS** band.

The Commission is, at the moment, the only entity that enjoys the experience, training, budget and prcsnce to be able to effectively govern the operation of licensees within the broadcast auxiliary bands. In the event of license, equipment and rules violations, the Commission is the only entity with a recognized, accepted and legally tested enforcement procedure.

Therefore, for purposes of “policing” the airwaves, specifically within the **BAS** bands, the Commission must continue to focus upon and discharge its mandated responsibilities under the Communications Act.

### **Conclusion**

Total RF and Broad Comm generally concur in the recommendations of the Task Force and applaud it and the Commission as a whole for their efforts in addressing these extraordinarily complex issues. Many of the suggestions made regarding increased flexibility in use, modification in and movement toward alternative methods of spectrum allocation and control promise to open the door to innovation and the development of new technologies and businesses – all to the ultimate benefit of the public.

In the broadcast arena, the Task Force’s recommendations appear to be cogent, rational and reasonable. Of course, the test of any policy is the manner of its ultimate application and administration. We believe that the Commission’s continued participation, as an “Assignor” of spectrum for **BAS** purposes, as the technical arbiter in the creation of appropriate technologic standards and requisites and as the agency responsible for the enforcement of the rules, regulations and etiquette required for the appropriate and efficient operation of the **BAS** bands is absolutely necessary.

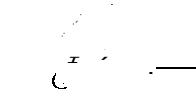
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<sup>26</sup> **NAB** and **NST, Inc.**, Joint Comment, 02-135, page 5

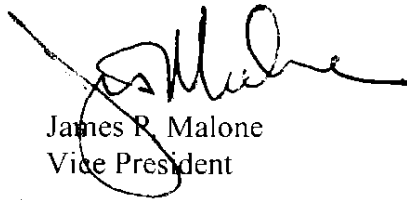
The Commission must continue to protect this extraordinarily important spectral band so as to guaranty its availability to broadcasters in supplying information and entertainment to the public.

Respectfully Submitted,

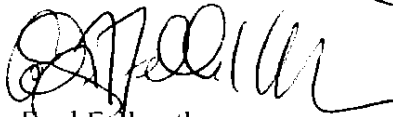
**Total RF Marketing, Inc.**



Steve Gansky  
President



James R. Malone  
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Fred Fellmeth  
General Counsel

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Louis Libin  
President